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APPEARANCES

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P R O C E E D I N G S

ERIC LEEDS: If I could ask everyone to please take their seats. All right, well good afternoon and welcome back. I'd like to introduce to you Commissioner Kristine Svinicki; she'll lead off this afternoon's plenary session. Commissioner Svinicki began her service on the Commission in March of 2008. She came to the Commission from a position on the staff of the Senate Armed Services Committee where she worked on issues such as nuclear defense programs, nuclear security, and environmental management. Prior to work in the Senate, Commissioner Svinicki worked as a nuclear engineer in various positions with the U.S. Department of Energy, both in Washington, D.C. and in Idaho. Before that, she was an energy engineer for the Wisconsin public service commission. Please join me in giving a warm welcome to Commissioner Svinicki.

[applause]

COMMISSIONER SVINICKI: Well, good afternoon everyone, is the microphone picking up okay, it sounds like it is, I know we had some interference this morning. Well, good afternoon and Eric thank you for that introduction, I came over to do a microphone check yesterday with Eric and he was kind enough to set the level of my podium for me so that I didn't have to do any awkward adjustments when I first came up here. Eric and I were talking about how this would be my fourth RIC although this is only the second time that Eric and I have been on stage together, but we made a commitment and I’m ashamed to say it included a fist bump yesterday that we were going to do this right today, so we're going to do this right.

Very pleased to take part in this year's Regulatory Information

Conference and I want to thank all of you who are attending, and most of you will not have the opportunity to view this crowd from up here, but it is really, really an impressive number of talented and capable individuals in this room, and then there are others, of course, tuning in remotely through our webcast, so I want to say good afternoon to them as well.

I want to add my thanks to Chairman Jaczko, and to the all of the NRC staff, those who work on this event and begin planning it, as he indicated, a year in advance, but also all of the volunteers. I think we were soliciting for more NRC volunteers to make the logistics of these two days move -- or these three days move very, very well, as recently as a couple of weeks ago. So thank you to you who heeded the call very early and who also agreed to volunteer and really make this conference the success that it is.

It is, of course, fueled by the hard work of all of the NRC staff and, as Chairman Jaczko indicated, of course that, centrally, the Office of Nuclear Reactor Regulation and the Office of Nuclear Regulatory Research, but really all of the staff people who make it possible. And I also want to acknowledge and thank that a lot of the people sitting in this room will subsequently be the ones providing all of the interesting information and presentations at the breakout sessions, so not all -- not only are all of you taking the time to attend, very many of you are helping the NRC make this conference a success by being on our panels and in our technical sessions, and that includes a lot of our colleagues and counterparts from other countries, again, very impressive number of you have traveled very long distances and also are contributing to the strength of the program.

Also many of our partners from federal agencies, state and local

agencies, again, NRC's mission cannot be accomplished without these important partnerships, so thank you for partnering with NRC over the course of the year, but also during this conference; it's a very important part is the technical sessions and I know that there is a lot of collaboration and dialogue and discussion that goes on there, in addition to what happens in the corridors over the lunch breaks, and in the breaks throughout the day.

Also, as I've done in years past, I wanted to take this opportunity with -- when I'm up here with this microphone to briefly thank some members of the advisory committee on reactor safeguards who are present today, I may sound like I have a little bit of a fixation with the ACRS, but it's just that if you don't know much about the ACRS, they are really, truly a historic body because they began their work under their current name when they chartered by the Atomic Energy Commission in 1953, they were made a statutory body by the Congress, and I believe it was 1957, but they began, basically, the function of the kind of advisory role that they play now under a different name, which was the Reactor Safeguards Committee as far back as 1947, so I mean we're really getting to the origins of the United States nuclear program. And I find, throughout the course of the year as I work on the kind of complex, technical issues that the Commission has to address, that I'm very personally and professionally grateful for the views and advice of the advisory committee on reactor safeguards.

Again, their history further than that of the Nuclear Regulatory Commission itself, and if you've had an opportunity to read any of the histories that Sam Walker and others have written of nuclear reactor regulation in the United States, you'll see that the history of the ACRS is interwoven with that of first the AEC and then the NRC, and I think their contribution really -- it continues

to this day, the types of input that they're giving to the complex decisions that we have to make. And one other acknowledgment and recognition that I wanted to focus before I began today, is that -- and we have a little bit different set-up in the front of the room, it has a little bit to do with the fact that attendance is at an all-time high, they have actually put two rows here in the front that traditionally all the rows would be set back, so we have this kind of split row, but directly behind the split row where members of the Commission are sitting, we have a group of people that I want to pause and talk about for a minute, and the group of people that I wanted to talk about their contributions for a minute is the staff of the individual members of the Commission.

Now, typically -- excuse me -- as commissioner, I should limit my acknowledgment only to members of my own staff, and of course I do want to acknowledge my own staff seated together here today to hear the boss talk about some thoughts she has. Jeff Sharkey is my chief of staff, Darani Reddick, my deputy chief of staff and counsel, Pat Castleman, who's my reactor adviser, Alan Frazier, my materials adviser, and Janet Lepre and Nicole Riddick who provide top notch administrative support to my staff. And that structure I've described there to you is typically what most members of the Commission would have a similar small group of very capable individuals that would be working.

The reason I wanted to pause and talk about this for a moment is that -- I talked frequently that if you work in the nuclear professions you get to meet a tremendous amount of talented people, you meet a good number of very successful people, very motivated people, but it's very, very rare that you meet people who are successful and motivated who say, “Well, you know, I did it all myself, and I deserve all the credit and nobody helps me get anything done.” So

most successful people will admit to you that they would not be able to achieve all of what they do day in and day out without the support of other very accomplished people. So in the case of Commission staff, I think that the contributions of members of individual commissioner staffs, it's often kind of hidden to everyone and I don't think that it necessarily receives the recognition that I certainly wanted to give it today, and some of the NRC senior managers have had, over the course of their careers an opportunity, to serve either a chairman or an individual Commission member on their staffs, but I fear that it is a contribution that is typically behind the scenes to an extent that I'm not sure that we value it and recognize it to the extent we need to.

The NRC, the way I look at it, can't get its work done unless it has a Commission that can get its work done, and the Commission is not as able to get its work done if we don't have folks, technical, legal, and administrative from the NRC staff, typically commissioners select the folks in their staff from other current NRC staff people. If those folks weren't willing to kind of step aside to volunteer from whatever it is that they were doing, whatever office in NRC that they were working in and say I'll take a chance on -- we've got new incoming commissioner, and I'm going to take a chance to apply for a position in that office because I think -- and I call it taking a chance because they may not know very much about how a Commission office functions.

But I also have -- and as most commissioners do the opportunity to interact with the chairman's staff, with other commissioners staffs, and again, to a person it's a very capable group of individuals. So I appreciate you indulging me in shining a spotlight on what we do, and what these folks do, and their dedication to the Commission getting its work done. And again, I wanted to

acknowledge that contribution and say that for any of you who either have done that in the past for other members of the Commission, either permanent or a rotational opportunity or you have some interest in doing it in the future, I certainly encourage you and I think the Commission can only be as high performing as the kinds of folks who are willing to come and work and support the work of the Commission, so I certainly thank my own staff. I want to acknowledge the staff of my colleagues as well, and thank them for the contributions the chairman talked about, a long list of accomplishments of the Commission and the NRC. These folks who work for commissioners are a part of that process, so thank you for letting me acknowledge that. And I have always so much prologue, so I think I'm getting to the -- to the end of my preamble, but so the end of the preamble was intended to be and God bless Ted Garish [spelled phonetically] and I don't know if he's still sitting somewhere over there as he was this morning, so as I was leaving to take my lunch break he said, "Well, I look forward to your neutron jokes." So the last two years I have begun my prepared remarks with a joke about, you know, some sort of really awful joke about, you know, a neutron or something like that, so now we have the power of the Internet, so I thought, well, if I've created this expectation I better come through. So I harnessed the power of the entire Internet and there's other really smart people in this room, so I know that someone's going to tell me later I didn't look hard enough, but the two jokes that I told last year and the year before appear to have -- I have used up the entire genre of those jokes in the last two years.

Now, considering the fact that the jokes I told in the last two years made a number of you groan out loud, it may be that some of you are very

pleased to hear that that is the entire universe, and then I debated whether -- because, you know, it's unfair to people who weren't here for the last two years, they might want to know what these jokes are. I figured, I can tell them so fast, and there's only two, so I'll go ahead and tell them again. The first one is --

[laughter]

So this is all Ted Garish's fault, if you know Ted Garish, so the first one is, you know, two atoms are walking down the street and one says to the other, “Well hold up for a second, I think I lost an electron,” and the other atom says, “Are you sure,” and this other atom goes, “I'm positive.”

[laughter]

So there's that one. Again, that's 50 percent of the whole category. You know, there's lots of jokes about chemistry and stuff, they're not very interesting to me, but -- so the second is a neutron -- this was last year's -- a neutron walks into a bar and the bartender says, “What'll you have?” The neutron says, “I think I'll have a beer, but how much is it?” and the bartender answers, “For you, no charge.”

[laughter]

Well, I wanted to start with some humor because, as we've already heard this morning, I mean, the events of last year were really sobering, many of us watched the events in Japan on TV. I think so many of us were heartsick for our friends and colleagues, and so as I was thinking about -- I tend to -- the chairman covers a lot of the agency's work, what he doesn't cover the EDO talks about, so individual commissioners we have to find and try to claim some other vantage point on the issues. So I was thinking, as I thought about what I might share with you this afternoon, that this past Sunday was also, just coincidentally,

the day that we set our clocks forward an hour, and if you're like me I don't really, you know, favor this day because you feel like an hour has been taken from you, but we do this in the spring and the autumn, and of course it causes you to reflect on the passing of the seasons, and I think we also reflect on the passing of time in that moment, at least I do, and in doing that, I think we realize the preciousness of time.

There's an issue of the National Geographic -- now I've been a reader of the National Geographic, maybe that's quaint, but ever since I discovered it in junior high -- I was at my sister's house and her husband had -- I think he had a lifetime subscription, which I guess young boys used to get, maybe again this is sounding very old fashioned, but -- so I discovered National Geographic magazine, and I really -- kind of I -- you could say I read it, but I still devour it, and I still have a subscription to this day, but there's interesting essays in there sometimes, and a contributing photographer of National Geographic, Joel Sartore, and I may not be pronouncing that right, but he wrote an essay that he entitled, “On Time,” meaning about time, and it reads as follows:

“We all have our ways of marking time. As a National Geographic photographer, my life is measured from one story to the next. I bought my first house in Nebraska while I was on an assignment shooting America's Gulf Coast. My oldest son was born in the middle of a long story about the Endangered Species Act. My daughter came along with a pack of gray wolves. Twenty stories later, though, it's the story on Alaska's north slope that I'll remember most. It was the story during which my wife got cancer. That's the one that made time stand still. Cancer is a thief, he writes, it steals time. Our days are already short with worry, then comes this relentless disease, unfair as a hailstorm at harvest

time. In the end, each of us has so little time, we have less of it than we can possible imagine."

Now, it was H.G. Wells who said, "We must not allow the clock and the calendar to blind us to the fact that each moment of life is a miracle and a mystery." This acknowledgment of the preciousness of human life makes me reflect upon another essay, and I'm certain it's one many of you have read, it is one that at the time it was published, which was in February of this year, I actually on the margins of various meetings and conference -- any number of people mention it as well, or when I mentioned it people kind of nodded their head in recognition, and it was a piece in the Telegraph, which is a newspaper in the United Kingdom. It was written by Michael Hanlon, and I believe he's the science editor of the Telegraph or perhaps he has been in the past, I'm not certain if that's still his title, but it was entitled "The World Has Forgotten the Real Victims of Fukushima" and I wanted to share this with you.

Again, if you'll bear with me, I thought it was very thought-provoking piece, so I wanted to make it part of what I was going to talk to you about today, and he writes as follows:

"I watched the terrible events which took place in Japan on March 11 last year with an appalled fascination," Hanlon writes, "The first truly epic disaster to be recorded and beamed into a billion homes in real time produced dreadful images which will be seared into my memory forever. Most terrible of all," he writes, "was the black wave, a tide of death which we saw apparently creeping over the landscape like a flood of treacle. Looking more closely, this feature of the tsunami was revealed to be an illusion. The sight of cars pushed this way and that way, doing U-turns on the highways bisecting workaday

landscape of open fields, scrappy industrial estates and, boatyards was the giveaway. These waves were sweeping away everything in their path and sluicing whole villages and towns into the Pacific. This was no tide of treacle; it was a wall of destruction traveling at 40 or 50 miles per hour. Hundreds, thousands of people were being killed before my eyes, some in the most horrible way. And on that first day, like all journalists, I began writing about the disaster much as I had written about the 2004 earthquake and tsunamis which had devastated the coasts of the Indian Ocean. But then something odd happened. When it became clear the waves had struck a nuclear power plant, Fukushima Daiichi, 100 or so miles north of Tokyo, it was almost as if the great disaster we had witnessed had been erased from view. Suddenly, all the reports concentrated on the possibility of a reactor meltdown, the overheating fuel rods, and the design flaws in this plant. I too found the nuclear angle compelling," he writes, "The forces of nature meet human hubris and the terror of the unchained atom. There was human drama, the whiff of cover-ups, institutional incompetence, heroism, the famous Fukushima 50, and pretty soon an international angle as, quote, 'deadly clouds of radiation,' unquote, formed which turned out to be nothing of the sort. Soon we journalists became versed in the terminology of nuclear disaster, sieverts and millisieverts, the difference between pressurized and boiling water reactors, the half-lives of various isotopes of cesium and iodine."

He writes, "It was at this point, at around day three, that I realized that something had gone seriously wrong the reporting of the biggest natural disaster to hit a major industrialized nation for a century. We have forgotten the real victims, the 20,000 and counting Japanese people killed, in favor of a nuclear scare story."

So he continues on, “Yesterday, together with the rationalist campaign Sense About Science, I attempted to put the record straight at the annual meeting of the American Association for the Advancement of Science in Vancouver. We argued that not only was the global media's reaction to the Tohoku earthquake skewed in favor of a nuclear disaster that never was, but that this reporting had profound economic and even environmental implications. For example, weeks after the tsunamis struck, several nations including Germany, Italy, and Switzerland announced that they were re-examining their commitment to civil nuclear power.

On March 15, the EU energy commissioner announced that the imminent meltdown of Number Four reactor threatened what he termed an apocalypse. Six weeks later, the German Chancellor Angela Merkel, a physicist by training announced the complete closure of the German nuclear power program. All this happens,” he writes, “amid mounting hysteria and an information void. It wasn't until several weeks later that the first considered scientific reports emerged from Japan, notable the report by Britain's nuclear regulator, Mike Weightman, which made it clear that although outdated, riddled with design flaws, and struck by geological forces that went way beyond the design brief, the Fukushima plant had survived remarkably intact.

He concludes, “There are bitter ironies in all of this. The panic caused a minor evacuation of Tokyo, which almost certainly resulted in more road deaths than will ever be attributable to radiation leaks. At one point, governments in Europe, including ours,” Hanlon writes, “were offering to fly expats home from places where the radiation levels were lower than the natural background count in Aberdeen or Cornwall. As Wade Allison, emeritus professor of physics at

Oxford University said, quote, 'The reporting at Fukushima was guided by the Cold War reflex that matched radiation with fear and mortal danger. Reactors have been destroyed, but the radiation at Fukushima,'" he wrote, "'has caused no loss of life and is unlikely to do so even in the next 50 years. The voices of science and common sense on which the future of mankind depends were drowned out and remain to be heard, even today. The result has been unnecessary suffering and great socio-economic damage.'"

Hanlon then says that he wants to take some self-criticism, he says, "Sometimes the media gets it wrong and we all have to hold our hands up here. 20,000-plus people perished in a real disaster, people about whom we in the West have heard very little. Nobody to date has died as a result of radiation leaks Fukushima Daiichi," and he concludes by saying, "Zero. A number you" -- "A number you will have read even less about than the 20,000 dead."

As the chairman mentioned yesterday at NRC headquarters just across the street here, we held a very, very sober one year commemoration of the events at Fukushima Daiichi and the ambassador of Japan to the United States, Ambassador Fujisaki, we were very honored to have present at our commemorative events, and he gave very brief remarks. During these remarks he told us all that he had recently been back in the areas of Japan that were devastated by the earthquake and subsequent tsunami, and he told us that he had asked the Japanese citizens if there were any messages that he could bring back to the United States and convey to the American people on their behalf, and he said they had two messages. The first was they asked their ambassador to carry back to the United States their deep gratitude for all of the assistance and support that were provided. He used the phrase, "Thank you for standing with

us," and he indicated that was the phrase that they had used.

And their second message was simply this, and the ambassador stated it just this simply, he said, their message is, "Please do not forget us." So I am certain that each of us continues to hold a care and concern for our Japanese friends and colleagues in our hearts as they move through their recovery from these events, but something else that the Ambassador Fujisaki had mentioned, which is that they speak of not just recovery, but renaissance or rebirth, and ultimately, a return to prosperity, so I'm certain that we all wish that for them.

Now, as the nuclear safety regulator for the United States, I had content in here about what the NRC has done after Fukushima. That's been covered very thoroughly this morning, we had a team of senior NRC experts that developed a set of a dozen recommendations you've heard at some length this morning about the action of the staff, we have had a lot of workshops with stakeholder input, and we are moving forward on a set of actions and including a set of orders, the content of which is very, very familiar to most of you in this audience, but I want to emphasize that the NRC did not wait to take necessary actions in response to Fukushima. I think something that we didn't go all the way back in the history this morning, is in addition to chartering the task force, within the first two months after the Fukushima events, the NRC took additional measures to ensure that U.S. nuclear power plants were safe. We directed our resident inspectors at every U.S. nuclear power plant to examine several areas, including the plant's mitigative strategies to ensure that plants can effectively cool down reactor cores and spent fuel pools following large fires, explosions, and other events.

The NRC's resident inspectors also examined the plants ability to

deal with the loss of all alternating current electricity sources, major flooding events, and fires and flooding combined with earthquakes. We also issued an information notice, again, this was in the early days, to our licensees to make them aware of the effects that the earthquake had on nuclear power plants in Japan with an expectation that they would review the information for applicability to their facilities, and consider any actions that might avoid similar problems, and also, an early action of the NRC, which I don't believe got discussed this morning, was we issued a bulletin to require nuclear power plant licensees to provide information on their plants approaches to ensure that their mitigative strategies would remain effective over time.

And I would note, again it may sound like I'm talking about a bulletin and an information notice, just as a set of context, bulletins are not common. The bulletin that I just described to you was the first one that we had issued, according to my accounting, in four years, and it was only the 11th bulletin since the year 1997, so overall, I would represent that these activities reinforced the agency's conclusion that our plants are operated in a way that provides for protection of public health and safety, and I think that conclusion remains operative today, and it makes possible a more studied and thoughtful development of lessons learned from Fukushima, for which I am personally grateful that because of that, what we found to date, we will have the opportunity to do a very thoughtful consideration of the lessons learned, and the actions that will come in the coming years as we learn more about these events. I think that's a development which will span many years, I think that that's a pretty well-acknowledged fact, that we're not going to be able move through all of these lessons learned and their implementation in a short period of time, and I think it's

going to involve many communities of practitioners from safety regulators to researchers. I had an opportunity to speak at an R&D summit a few weeks ago, and I think the research community is pivoting to try to figure out what value they can add to some of these questions. I think that contributions will be made by policy makers, by non-governmental organizations, and certainly the industry and operators themselves. It's my view that it's important to do justice to this work because it's very, very important and taking the time necessary to get it right is something that I think is going to serve us well over the long term.

This past summer, Daniel Carpenter, he's a professor of government at Harvard University, and he's the author of a book -- I'm going to be referring to some of the content of it -- the book he authored is called "Reputation and Power, Organization, Image, and Pharmaceutical Regulation at the FDA" but he wrote -- what piques my interest is he wrote an essay for the Washington Post and it was entitled "In Washington It's Always the 11th Hour." He writes:

"There are few things in life we dread more than deadlines. As President Obama and congressional leaders struggle to strike a deficit reduction agreement before August 2nd," this was published in July, "A critical feature of this battle," he wrote, "as in many other political fights, is the ticking clock. A deadline under which our leaders sweat, bargain, and decide. Our nation's capital has become deadline Washington. The Congress, now scrambling to avert a default, managed to avoid a government shutdown this past spring with less than two hours to spare. We have deadlines for peace deals, we have deadlines for agencies to issue regulations," he writes, "we have deadlines for passing legislation and for producing proposals. We have deadlines," he writes,

"for issuing deadlines. Deadlines are often the only way to get anything done in an age of gridlock and polarization," he continues, "but they have serious limits. Some are obvious while others are tied up in behaviors we have trouble recognizing. Social science research offers insights on the pitfalls of making decisions while staring down the clock."

One example of this provided by Professor Carpenter in that deadlines have been shown to limit creativity and force mistakes. He writes, "Most everyone, certainly most people who might be drawn to political life, has experienced the unique adrenaline-fueled upsides and panic-inducing downsides of a looming deadline. Some of this stress is useful, but it also strains focus and can be counterproductive." He writes of a study which shows that, as a deadline approaches, group participants disregard and sometimes denigrate those who view contrarian opinions. As a result, creative solutions can get shoved aside.

Another example Carpenter writes, "A few years ago I joined some Harvard Medical School colleagues in examining the deadlines, that since 1992, Congress has placed upon the Food and Drug Administration's drug reviews. Our research found that medications approved right before these deadlines were considerably more likely to be pulled from the market or have significant warning labels attached later on. More recent studies suggest that the link persists."

Yet another lesson Professor Carpenter offers is that, quote, "Many deadlines are missed, leading to disenchantment and poor coordination." The research he has analyzed reveals that, quote, "People are generally bad at predicting how long it will take them to do something, and they're even worse at guessing how long it will take other people to get something done. Political scientists have found that, compared with agencies not operating under a time

limit, agencies making rules under a deadline are far more likely to give inaccurate predictions about when the final rule will emerge. Unless used judiciously," he writes, "deadlines can make themselves less credible and less effective.

After reading this, I was reminded of the philosopher Lao Tzu who wrote, "Nature does not hurry, yet everything is accomplished." Well, I've talked a lot about time with you, and since I want to leave us a good amount of time to have any question and answer, I wanted to close with something -- the events of the past 12 months have been somber, I've read a very somber discussion and account of those events. I wanted to close with something that would maybe end on a note of some hopefulness or optimism because I think it's hard sometimes to keep your optimism and it's so essential that we do so. There's very few articles that you will run across that are entitled "Five Great Things About Getting Older" but I found an article --

[laughter]

-- and since all of us, I think, are getting older, I think that has to be an established fact, and we prefer getting older over the alternative, which is the old bad joke, but I wanted to share a couple of these -- two of these five great things about getting older. Now, the first is presented by Barbara Strauch, who -- she's a science editor of the New York Times, and she's an author of a book, which I admit I have not read, but it's called "The Secret Life of the Grownup Brain". She writes, "Wise decisions will come more easily as we get older. Scientists used to think that we lose a significant number of brain cells as we age, but more sophisticated scans have debunked that theory. We know now that we hit our cognitive peak between the ages of 40 and 68. Through the years, our brains

build up connections and recognize patterns, meaning we are better problem solvers and can more quickly get to the gist of an argument. Older brains," she writes, "can more swiftly make the right calls."

The second great thing about getting older is offered by Laura Carstensen and she's the director of the Stanford Center on Longevity in Stanford, California, and she writes, "You will be happier as you get older," and this is a quote from her, "As it turns out," according to the research, "most grumpy old people used to be grumpy young people."

[laughter]

"Aging," she says, "does not turn a cheerful person into a grouch. To the contrary, research has shown that as we age we become more emotionally stable and content." I'm just reading what the research shows. "In early adulthood, there are a lot of what-ifs. Then you spend the next few decades striving to achieve those goals." But she writes, "When you're older, the what-ifs have been resolved."

So the RIC, as I said, is the largest audience that I'll address in any given year, and as I look around this massive ballroom, and I think, you know, there are many people that I've had the opportunity to work with, many NRC staff, again, whom I hold in high regard, as do all the members of the Commission and the senior managers here at NRC, but you know, this is a tremendous collection of people, and I've worked around elected officials and politicians, and it's hard, you know, even to rally as many people as are in this room around any one central issue or problem, so I can't help but reflect from when I get to stand up here and look into all of your faces, and again, knowing a good number of you and knowing how capable and committed you are, it just -- it

strikes me that if there were anything that all of you chose to focus and direct your considerable energies on, I think there's almost nothing you couldn't tackle or change, so I urge you to individually and collectively direct yourself towards those issues that you care about, that energize you because it will make a difference, it really will.

There's enough -- there's enough capability and talent in this room, I think you could take on anything, and I'll just say that, you know, some of you know that I'm an enthusiast about Apple products and I think that, you know, my iPad and iPhone are never far from me, so when we lost Steve Jobs this year, I really thought that we lost a visionary in the information technology industry. So I was going to close with a quote from him, and it goes a little bit towards what I was saying about encouraging you to direct your interests and talents against anything you want to do, and it really will make a difference. He said, "Your work is going to fill a large part of your life, and the only way to be truly satisfied is to do what you believe to be great work. The only way to do great work, he said, is to love what you do. If you haven't found it yet, keep looking, don't settle. As with all matters of the heart, you'll know it when you find it, and like any great relationship, it just gets better and better as the years roll on. So keep looking until you find it, don't settle." Thank you.

[applause]

I'm looking at Eric's watch because he's -- I don't have a watch on. We do have time for some questions.

ERIC LEEDS: We have about 10 minutes for questions, commissioner, so thank you. First -- the first question: With respect to the extended fuel storage of spent fuel, has the, quote, "Lady who sings the blues,

yet provided some happy news?" unquote.

COMMISSIONER SVINICKI: Oh gosh, someone was the RIC in 2009 I guess. You know, I would say that the Blue Ribbon Commission has now issued its final report, Chairman Jaczko talked about the fact that policy makers will be -- a number of congressional hearings have been held, and I think that law makers are taking those recommendation with a lot of seriousness, they are really -- again, and I have some time that I spent working on Capitol Hill, as did a number of my colleagues. I think, to receive a report like that, and hold -- I think it was at least three hearings in a very short span of time, that is Congress taking a real serious look at something because they get a lot of reports, the Armed Services Committee, on which I served, I think we counted at one point, we got like 200 annual reports a year as a committee.

So I think that the Blue Ribbon Commission recommendations are getting a lot of visibility. Again, I agree with Chairman Jaczko that the path has not been set of individual actions that departments or agencies might take, and I think that -- I'm not certain whether Chairman Jaczko mentioned this, but just thematically of course, our concern is spent fuel now. Do we have the authority and the ability to be able to make sure that it is safe and secure, and I think the Commission, to date, has found that we do. So while policy makers make policy, we will continue our safety and security oversight role in making sure that these materials can be kept safe and secure.

ERIC LEEDS: Okay, thank you. Your next question, with the industry implementation of FLEX and the other tier one recommendations being ordered by the NRC, is there really still a need for filtering hardened vents?

COMMISSIONER SVINICKI: Still a need? I'm not -- I'm not certain

if the question means should we continue to produce any analysis on that question, if it means that, I think the path is set for the staff to provide some recommendations to the Commission, used to be in July, but I think it'll be in August now. You know, I will state that -- because I can speak, of course, only for myself -- that, from what I understand -- and again I look forward to receiving whatever it is analysis and kind of a policy discussion paper that the NRC staff might put forward on the issue of filtered vents, but I have visited a good number of U.S. plants since the events at Fukushima, so naturally, again, as we've discussed, you pivot to current events and so my tours have become more focused on issues like venting procedures. I, you know, have asked to see -- kind of look at vents to the extent that that's really relevant to much of anything, staring at one.

But I would say for myself that at this point, I'm not convinced that filtered vents are merited, and I think -- the way I thought of it for myself was: In order to feel that that was needed, I would have to have a fundamental lack of confidence in so many other measures, and so since I, in general from what I've seen, and what's in place -- and again, we're talking filtered, not hardened vents, which the Commission has already ordered. You know, I look forward to receiving whatever the staff is going to bring forward, but in my view, I simply haven't been convinced of it because I think that we have a lot of measures that come into play, and a lot of operator actions and decision making, fundamental differences in the whole context from Fukushima that would come into play, that would make it a different sort of circumstance.

ERIC LEEDS: Okay, thank you. All right, this is a little bit of long question, but let me start. In your assessment, and given what you

communicated about Fukushima, do you see any validity to the idea of hybrid energy, where a small modulator reactor and other forms of energy generation facilities would be connected to optimize energy generation cost?

COMMISSIONER SVINICKI: I'm going to interpret the question to be somewhat about is this locating, perhaps, small modulator facilities at a location where their heat can be used directly in some sort of industrial process? If that's the question, and I apologize if I'm misinterpreting it, but then obviously just basically as an engineer I would say there's a tremendous amount of efficiencies in the ability to co-locate and use heat, you know, cogeneration, and other concepts and applications. There's a reason why those are favored in certain types -- near to certain types of industrial processes that require the use of a lot of heat, so there's just, as a matter of kind of the thermodynamics of it, there's a lot of natural efficiencies in that system.

ERIC LEEDS: Thank you. It now appears that Tepco had been considering seismic research indicating risks [unintelligible] the Fukushima's design basis for two years prior to the recent quake and tsunami. So the question is, can we really afford to go slow and eschew deadlines?

COMMISSIONER SVINICKI: Well, as a first matter, I would say that I can't necessarily validate what the Japanese regulator was looking at. The Japanese government has, at least I think, three different commissions and independent groups, and I think also the Japanese legislature has reviews underway to determine root causes and figure out what happened there, and I will let that process, in terms of what was known at what time, I'm going to let the people much closer to those facts make those conclusions rather than speculate on that, but I did reference our near-term task force at the NRC, and their

conclusion, which I think all the staff work continuing to this day has substantiated and supported, is that there is not an imminent threat to the continued operation of reactors in the United States. And as I stated, it's my opinion that that gives us the opportunity to do the analysis and to develop a disciplined path forward for the recommendations.

ERIC LEEDS: Okay, and commissioner we have time for one last question. Please provide us your thoughts and views on fuel recycling/reprocessing.

COMMISSIONER SVINICKI: I -- it's interesting, it -- that isn't something that I have to do too much thinking about day-to-day in this position. I think the regulator is always in the circumstance where they want to be ready if an application is received, however, we can't really be advancing it independent of interest from applicants and operators and having a reprocessing facility, so I think, in that way, between the NRC and those who might be interested in applying for a license for reprocessing facility, I always call it a footrace meaning, you know, we're always going to be kind of pacing along with each other, but I've been hearing about interest, perhaps, in an application for a reprocessing facility since I arrived at NRC in 2008, and I do stand here today, and you know, haven't seen an application. So I think that we just need to keep an open line of communication with those who might be interested in that type of facility so that we're not the long pole in the tent, but on the other hand, I don't see NRC as being the one to be way in the lead on that question.

ERIC LEEDS: Well, thank you very much commissioner.

COMMISSIONER SVINICKI: Okay, thank you.

[applause]

ERIC LEEDS: Thank you commissioner. If -- I want to give everyone a break, we're going to change, where I'm going to have Dr. Brian Sheron and Commissioner Apostolakis come up. I understand from this morning we went a little bit long and people were getting tired. If you'd to just stand up and stretch your legs, please, let's take the opportunity. Thank you. All right.

[Whereupon, the session concluded]